BRAIN RESEARCH

VOL. 519 NOS. 1/2 CONTENTS 11 JUNE 1990

Research Reports

AF64A depletes hippocampal high-affinity choline uptake but does not alter the density of α-bungarotoxin binding sites or modify the effect of exogenous choline
B.J. Morley and L.L. Garner (U.S.A.) 1

Chronic benzodiazepine antagonist treatment and its withdrawal upregulates components of GABA-benzodiazepine receptor ionophore complex in cerebral cortex of rat
S.K. Kulkarni and M.K. Ticku (U.S.A.) 6

Acute increases in arterial blood pressure produced by occlusion of the abdominal aorta induces antinociception: peripheral and central substrates
C.L. Thurston and A. Randich (U.S.A.) 12

Inhibiting carbonic anhydrase in brain tissue increases the respiratory response to rebreathing CO_2
J.M. Adams and N.L. Johnson (U.S.A.) 23

Sulfonylurea binding sites associated with ATP-regulated K^+ channels in the central nervous system: autoradiographic analysis of their distribution and ontogenesis, and of their localization in mutant mice cerebellum
C. Mourre, C. Widmann and M. Lazdunski (France) 29

Ceruletide, a cholecystokinin-related peptide, attenuates haloperidol-induced increase in dopamine release from the rat striatum: an in vivo microdialysis study
T. Kihara, M. Ikeda and A. Matsushita (Japan) 44

Colchicine prevents recovery of nerve conduction at chronic demyelination
S. Liverant and H. Meiri (Israel) 50

Localization of sulfated glucoronyl glycolipids in human dorsal root and sympathetic ganglia
T. Ariga, S. Kusunoki, K. Asano, M. Oshima, M. Asano, T. Mannen and R.K. Yu (Japan, U.S.A.) 57

Biphasic action of dextrorphan on penicillin induced bursting in rat hippocampal slice
J. Aryanpur, A.E. Cole, C.U. Eccles and R.S. Fisher (U.S.A.) 65

Giant axonopathy characterized by intermediate location of axonal enlargements and acceleration of neurofilament transport
S. Monaco, T. Wongmongkolrit, C.M. Shearson, A. Patton, B. Schaetzle, L. Autilio-Gambetti, P. Gambetti and L.M. Sayre (U.S.A.) 73

In vivo evidence for an inhibitory glutaminergic control of serotonin release in the caudate nucleus: involvement of GABA neurons
D. Becquet, M. Faudon and F. Hery (France) 82

The NMDA antagonist, MK-801, suppresses long-term potentiation, kindling, and kindling-induced potentiation in the perforant path of the unanesthetized rat
M.E. Gilbert and C.M. Mack (U.S.A.) 89

Percentages of dorsal root axons immunoreactive for galanin are higher than those immunoreactive for calcitonin gene-related peptide in the rat
C.M. Klein, K.N. Westlund and R.E. Coggeshall (U.S.A.) 97

Effects of morphine treatment on pro-opiomelanocortin systems in rat brain
D.M. Bronstein, R. Przewlocki and H. Akil (U.S.A., Poland) 102

Guanethidine-induced adrenergic sympathectomy augments endoneurial perfusion and lowers endoneurial microvascular resistance
D.W. Zochodne, Z. Huang, K.K. Ward and P.A. Low (U.S.A.) 112

The interaction of acetylcholinergic and serotonergic neural systems on performance in a continuous non-matching to sample task
Y. Sakurai and G.L. Wenk (Japan, U.S.A.) 118

Chronic exposure to low doses of MPTP. I. Cognitive deficits in motor asymptomatic monkeys
J.S. Schneider and C.J. Kovelowski, II (U.S.A.) 122

Glycine synergistically potentiates the enhancement of LTP induced by a sulfhydryl reducing agent
D.L. Tauck and G.A. Ashbeck (U.S.A.) 129

Patterns of immune rejection of mouse neocortex transplanted into neonatal rat brain, and effects of host immunosuppression
D.W. Marion, I.F. Pollack and R.D. Lund (U.S.A.) 133

6-Hydroxydopamine lesions of the ventral tegmentum abolish D-amphetamine and morphine analgesia in the formalin test but not in the tail flick test
M.J. Morgan and K.B.J. Franklin (Canada) 144

Androgen-dependent vasopressinergic neurons are involved in social recognition in rats
R.-M. Bluthe, J. Schoenen and R. Dantzer (France, Belgium) 150

Tonotopic features of speech-evoked activity in primate auditory cortex
M. Steinschneider, J.C. Arezzo and H.G. Vaughn Jr. (U.S.A.) 158

The involvement of neurokinin receptor subtypes in somatosensory processing in the superficial dorsal horn of the cat
S.M. Fleetwood-Walker, R. Mitchell, P.J. Hope, N. El-Yassir, V. Molony and C.M. Bladon (U.K.) 169

Discharge patterns of pallidal neurons with input from various cortical areas during movement in the monkey
A. Nambu, S.-i. Yoshida and K. Jinnai (Japan) 183

Neurogenesis of the hamster suprachiasmatic nucleus
F.C. Davis, R. Boada and J. LeDeaux (U.S.A.) 192

(contents continued on p. 360)

Cited in Biological Abstracts (BIOSIS) — Chem. Abstracts — Index Medicus — Current Contents (Life Sci.) — Excerpta Medica (EMBASE) — Psychological Abstracts (PsycINFO) — PASCAL M

BRAIN RESEARCH

VOL. 519 NOS. 1/2 CONTENTS 11 JUNE 1990

Research Reports

AF64A depletes hippocampal high-affinity choline uptake but does not alter the density of α-bungarotoxin binding sites or modify the effect of exogenous choline
B.J. Morley and L.L. Garner (U.S.A.) 1

Chronic benzodiazepine antagonist treatment and its withdrawal upregulates components of GABA-benzodiazepine receptor ionophore complex in cerebral cortex of rat
S.K. Kulkarni and M.K. Ticku (U.S.A.) 6

Acute increases in arterial blood pressure produced by occlusion of the abdominal aorta induces antinociception: peripheral and central substrates
C.L. Thurston and A. Randich (U.S.A.) 12

Inhibiting carbonic anhydrase in brain tissue increases the respiratory response to rebreathing CO_2
J.M. Adams and N.L. Johnson (U.S.A.) 23

Sulfonylurea binding sites associated with ATP-regulated K^+ channels in the central nervous system: autoradiographic analysis of their distribution and ontogenesis, and of their localization in mutant mice cerebellum
C. Mourre, C. Widmann and M. Lazdunski (France) 29

Ceruletide, a cholecystokinin-related peptide, attenuates haloperidol-induced increase in dopamine release from the rat striatum: an in vivo microdialysis study
T. Kihara, M. Ikeda and A. Matsushita (Japan) 44

Colchicine prevents recovery of nerve conduction at chronic demyelination
S. Liverant and H. Meiri (Israel) 50

Localization of sulfated glucoronyl glycolipids in human dorsal root and sympathetic ganglia
T. Ariga, S. Kusunoki, K. Asano, M. Oshima, M. Asano, T. Mannen and R.K. Yu (Japan, U.S.A.) 57

Biphasic action of dextrorphan on penicillin induced bursting in rat hippocampal slice
J. Aryanpur, A.E. Cole, C.U. Eccles and R.S. Fisher (U.S.A.) 65

Giant axonopathy characterized by intermediate location of axonal enlargements and acceleration of neurofilament transport
S. Monaco, T. Wongmongkolrit, C.M. Shearson, A. Patton, B. Schaetzle, L. Autilio-Gambetti, P. Gambetti and L.M. Sayre (U.S.A.) 73

In vivo evidence for an inhibitory glutaminergic control of serotonin release in the caudate nucleus: involvement of GABA neurons
D. Becquet, M. Faudon and F. Hery (France) 82

The NMDA antagonist, MK-801, suppresses long-term potentiation, kindling, and kindling-induced potentiation in the perforant path of the unanesthetized rat
M.E. Gilbert and C.M. Mack (U.S.A.) 89

Percentages of dorsal root axons immunoreactive for galanin are higher than those immunoreactive for calcitonin gene-related peptide in the rat
C.M. Klein, K.N. Westlund and R.E. Coggeshall (U.S.A.) 97

Effects of morphine treatment on pro-opiomelanocortin systems in rat brain
D.M. Bronstein, R. Przewlocki and H. Akil (U.S.A., Poland) 102

Guanethidine-induced adrenergic sympathectomy augments endoneurial perfusion and lowers endoneurial microvascular resistance
D.W. Zochodne, Z. Huang, K.K. Ward and P.A. Low (U.S.A.) 112

The interaction of acetylcholinergic and serotonergic neural systems on performance in a continuous non-matching to sample task
Y. Sakurai and G.L. Wenk (Japan, U.S.A.) 118

Chronic exposure to low doses of MPTP. I. Cognitive deficits in motor asymptomatic monkeys
J.S. Schneider and C.J. Kovelowski, II (U.S.A.) 122

Glycine synergistically potentiates the enhancement of LTP induced by a sulfhydryl reducing agent
D.L. Tauck and G.A. Ashbeck (U.S.A.) 129

Patterns of immune rejection of mouse neocortex transplanted into neonatal rat brain, and effects of host immunosuppression
D.W. Marion, I.F. Pollack and R.D. Lund (U.S.A.) 133

6-Hydroxydopamine lesions of the ventral tegmentum abolish D-amphetamine and morphine analgesia in the formalin test but not in the tail flick test
M.J. Morgan and K.B.J. Franklin (Canada) 144

Androgen-dependent vasopressinergic neurons are involved in social recognition in rats
R.-M. Bluthe, J. Schoenen and R. Dantzer (France, Belgium) 150

Tonotopic features of speech-evoked activity in primate auditory cortex
M. Steinschneider, J.C. Arezzo and H.G. Vaughn Jr. (U.S.A.) 158

The involvement of neurokinin receptor subtypes in somatosensory processing in the superficial dorsal horn of the cat
S.M. Fleetwood-Walker, R. Mitchell, P.J. Hope, N. El-Yassir, V. Molony and C.M. Bladon (U.K.) 169

Discharge patterns of pallidal neurons with input from various cortical areas during movement in the monkey
A. Nambu, S.-i. Yoshida and K. Jinnai (Japan) 183

Neurogenesis of the hamster suprachiasmatic nucleus
F.C. Davis, R. Boada and J. LeDeaux (U.S.A.) 192

(contents continued on p. 360)

Cited in Biological Abstracts (BIOSIS) — Chem. Abstracts — Index Medicus — Current Contents (Life Sci.) — Excerpta Medica (EMBASE) — Psychological Abstracts (PsycINFO) — PASCAL M

(contents continued)

Selective axonal and terminal degeneration in the chicken brainstem and cerebellum following exposure to *bis*(1-methylethyl)phosphorofluoridate (DFP)
D. Tanaka Jr., S.J. Bursian and E. Lehning (U.S.A.) 200
Cholinergic but not GABAergic neuronal markers are decreased in primary neuronal cultures treated with choline mustard
J.C. Baskey, E.H. Colhoun and R.J. Rylett (Canada) 209
The center for controlling the near reflex in the midbrain of the monkey: a double labelling study
S. Ishikawa, H. Sekiya and Y. Kondo (Japan) 217
Autoradiographic analysis of age-dependent changes in serotonin 5-HT_2 receptors of the human brain postmortem
R. Gross-Isseroff, D. Salama, M. Israeli and A. Biegon (Israel) 223
Neuropeptide Y receptor binding sites in human brain. Possible alteration in Alzheimer's disease
J.-C. Martel, R. Alagar, Y. Robitaille and R. Quirion (Canada) 228
Enhanced production of superoxide anion by microglia from trisomy 16 mice
C.A. Colton, J. Yao, D. Gilbert and M.-L. Oster-Granite (U.S.A.) 236
Somatosensory climbing fiber responses in the caudal posterior vermis of the cat cerebellum
J. Brons, L.T. Robertson and G. Tong (U.S.A.) 243
Near-infrared optical responses in feline brain and skeletal muscle tissues during respiratory acid–base imbalance
N.B. Hampson and C.A. Piantadosi (U.S.A.) 249
The effects of intranigral GABA and dynorphin A injections on strial dopamine and GABA release: evidence that dopamine provides inhibitory regulation of striatal GABA neurons via D_2 receptors
M.S. Reid, W.T. O'Connor, M. Herrera-Marschitz and U. Ungerstedt (Sweden) 255
α_1-Adrenergic receptors in the nucleus tractus solitarii region of rats with experimental and genetic hypertension
M.R. MacLean, M.I. Phillips, C. Sumners and M.K. Raizada (U.S.A.) 261
Long-term effect of MPTP in the mouse brain in relation to aging: neurochemical and immunocytochemical analysis
I. Date, D.L. Felten and S.Y. Felten (U.S.A.) 266
Somatostatin depresses GABA receptor-mediated inhibition in the rat dorsolateral septal nucleus
M.J. Twery and J.P. Gallagher (U.S.A.) 277
Antinociceptive interactions between intrathecally administered α noradrenergic agonists and 5'-*N*-ethylcarboxamide adenosine
S. Aran and H.K. Proudfit (U.S.A.) 287
Rat organum vasculosum laminae terminalis in vitro: responses to changes in sodium concentration
L. Vivas, E. Chiaraviglio and H.F. Carrer (Argentina) 294
17β-Estradiol depolarization of hypothalamic neurons is mediated by cyclic AMP
T. Minami, Y. Oomura, J. Nabekura and A. Fukuda (Japan) 301
Basal and stimulated release of substance P from dissociated cultures of vagal sensory neurons
D.B. MacLean, F. Wheeler and L. Hayes (U.S.A.) 308
Brain pathways of the chromatophore system in the squid *Lolliguncula brevis*
A. Novicki, B.U. Budelmann and R.T. Hanlon (U.S.A.) 315

Short Communications

Calcitonin gene-related peptide immunoreactivity in neuronal perikarya in dorsal root
S. Jeftinija and K. Jeftinija (U.S.A.) 324
Dexamethasone attenuates exercise-induced dental analgesia in man
P. Kemppainen, P. Paalasmaa, A. Pertovaara, A. Alila and G. Johansson (Finland) 329
A cloned G protein-coupled protein with a distribution restricted to striatal medium-sized neurons. Possible relationship with D_1 dopamine receptor
S.N. Schiffmann, F. Libert, G. Vassart, J.E. Dumont and J.-J. Vanderhaeghen (Belgium) 333
Is the function of dendritic spines to concentrate calcium?
W.R. Holmes (U.S.A.) 338
Cortical field potential associated with hand movement on warning-imperative visual stimulus and cerebellum in the monkey
K. Sasaki, H. Gemba and T. Tsujimoto (Japan) 343
Adrenalectomy prevents the stress-induced decrease in in vivo [^{3}H]Ro15-1788 binding to $GABA_A$ benzodiazepine receptors in the mouse
A. Weizman, R. Weizman, K.A. Kook, F. Vocci, S.I. Deutsch and S.M. Paul (U.S.A.) 347
Ketamine blockade of spreading depression: rapid development of tolerance
T. Amemori and J. Bures (Czechoslovakia) 351
Cerebellar phenotype of two alleles of the 'reeler' mutation on similar backgrounds
A.M. Goffinet (Belgium) 355

Author Index 358